

—PRODUCT INFORMATION—

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6AK10

Compactron Triple Triode

- COLOR TV TYPE
- IMPROVED LINEARITY
- HIGH GAIN
- TRANSCONDUCTANCE = 7000 MICROMHOS
- AMPLIFICATION FACTOR = 53

The 6AK10 is a compactron containing three high- μ triodes. It is designed primarily for service as a color-difference amplifier in color television receivers and is particularly suited for use with solid-state demodulators.

GENERAL

ELECTRICAL

Cathode - Coated Unipotential				
Heater Characteristics and Ratings				
Heater Voltage, AC or DC*	6.3 ± 0.6 Volts			
Heater Current•	0.9 Amperes			
Direct Interelectrode Capacitances, approximate♦				
	Section 1	Section 2	Section 3	
Grid to Plate: (g to p)	3.2	3.0	3.0	pf
Input: g to (h + k)	4.2	4.2	4.2	pf
Output: p to (h + k)	0.3	0.4	0.54	pf

MECHANICAL

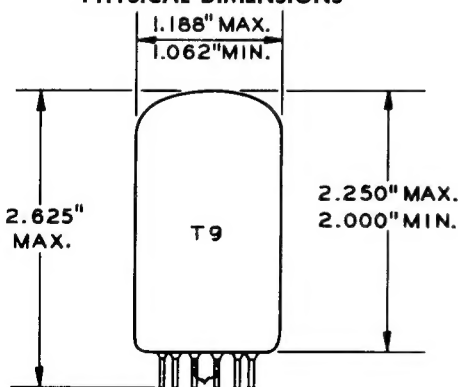
Operating Position - Any	
Envelope - T-9, Glass	
Base - E12-70, Button 12-Pin	
Outline Drawing - EIA 9-59	
Maximum Diameter	1.188 Inches
Minimum Diameter	1.062 Inches
Maximum Over-all Length	2.625 Inches
Maximum Seated Height	2.250 Inches
Minimum Seated Height	2.000 Inches

MAXIMUM RATINGS

DESIGN-MAXIMUM VALUES, EACH SECTION

Plate Voltage	330	Volts
Plate Dissipation	2.0	Watts
Heater-Cathode Voltage		
Heater Positive with respect to Cathode		
DC Component	100	Volts
Total DC and Peak	200	Volts
Heater Negative with respect to Cathode		
Total DC and Peak	200	Volts
Grid Circuit Resistance	0.5	Megohms

PHYSICAL DIMENSIONS

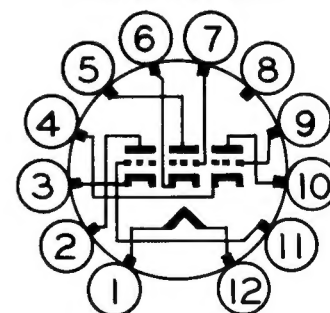


EIA 9-59

TERMINAL CONNECTIONS

- Pin 1 - Heater
- Pin 2 - Plate (Section 3)
- Pin 3 - Cathode (Section 3)
- Pin 4 - Cathode (Section 1)
- Pin 5 - Plate (Section 2)
- Pin 6 - Cathode (Section 2)
- Pin 7 - Grid (Section 2)
- Pin 8 - No Connection
- Pin 9 - Grid (Section 1)
- Pin 10 - Plate (Section 1)
- Pin 11 - Grid (Section 3)
- Pin 12 - Heater

BASING DIAGRAM



EIA 12FE

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express written agreement to the contrary, General Electric Company assumes no liability for patent infringement arising out of any use of the tubes with other devices or elements by any purchaser of tubes or others.

MAXIMUM RATINGS (Cont'd)

Design-Maximum ratings are limiting values of operating and environmental conditions applicable to a bogey electron tube of a specified type as defined by its published data and should not be exceeded under the worst probable conditions.

The tube manufacturer chooses these values to provide acceptable serviceability of the tube, making allowance for the effects of changes in operating conditions due to variations in the characteristics of the tube under consideration.

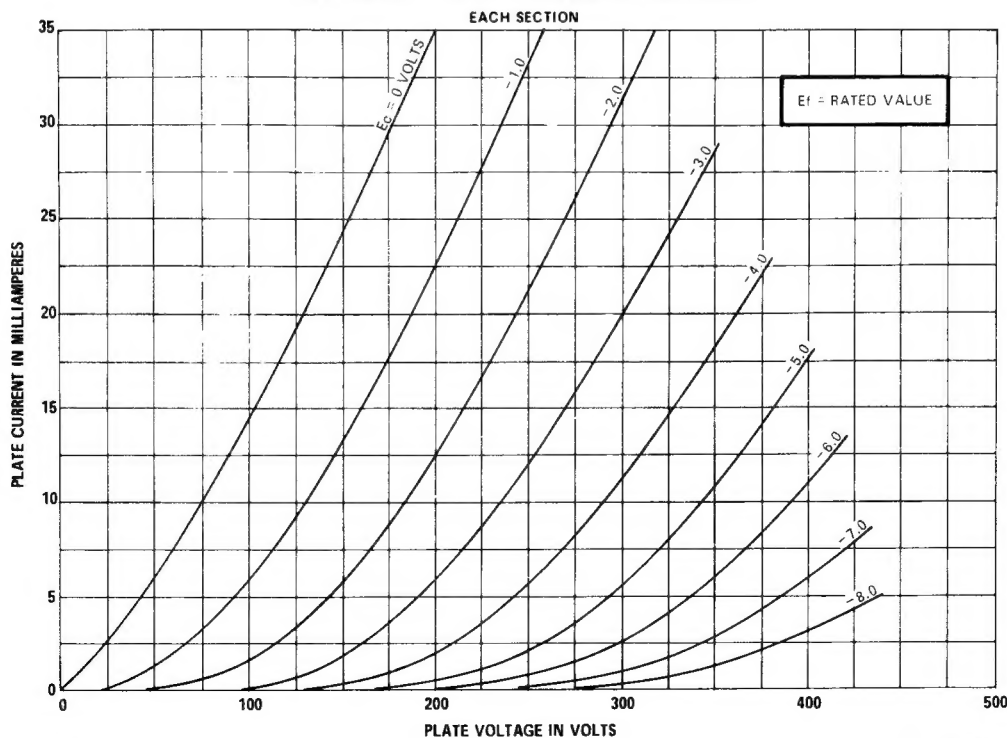
The equipment manufacturer should design so that initially and throughout life no design-maximum value for the intended service is exceeded with a bogey tube under the worst probable operating conditions with respect to supply-voltage variation, equipment component variation, equipment control adjustment, load variation, signal variation, environmental conditions, and variations in the characteristics of all other electron devices in the equipment.

CHARACTERISTICS AND TYPICAL OPERATION**AVERAGE CHARACTERISTICS, EACH SECTION**

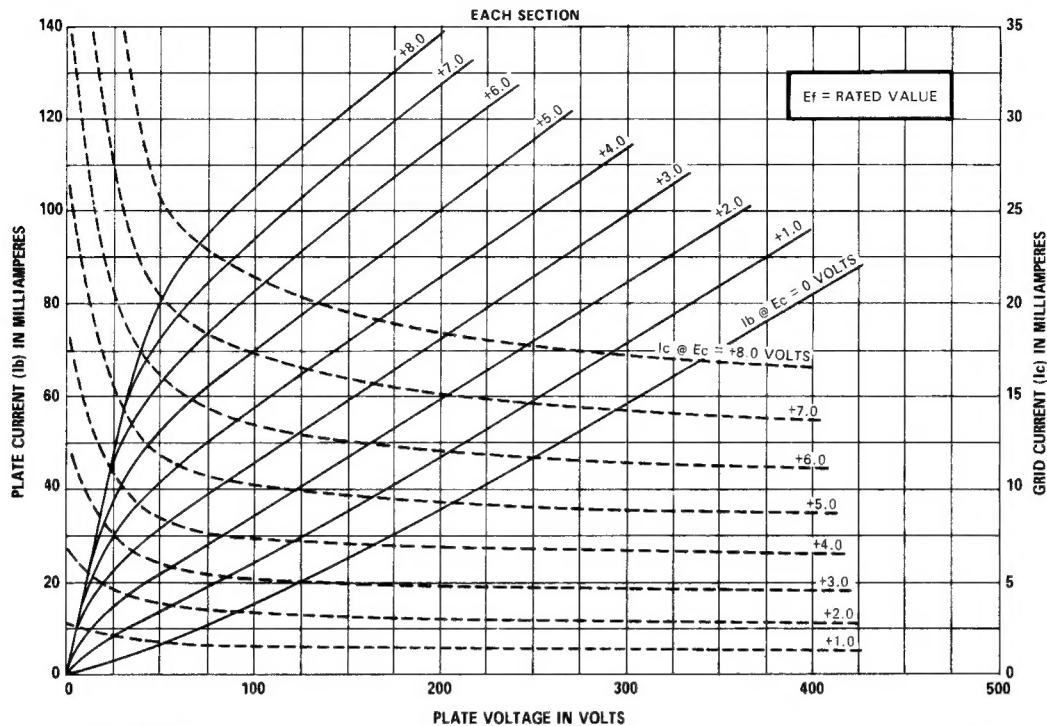
Plate Voltage.....	200	Volts
Cathode-Bias Resistor	230	Ohms
Amplification Factor.....	53	
Plate Resistance, approximate	7500	Ohms
Transconductance	7000	Micromhos
Plate Current	10	Milliamperes
Grid Voltage, approximate		
$I_b = 100$ Microamperes	-7	Volts

NOTES

- ★ The equipment designer should design the equipment so that heater voltage is centered at the specified bogey value, with heater supply variations restricted to maintain heater voltage within the specified tolerance.
- Heater current of a bogey tube at $E_f = 6.3$ volts.
- ◆ Without external shield.

AVERAGE PLATE CHARACTERISTICS

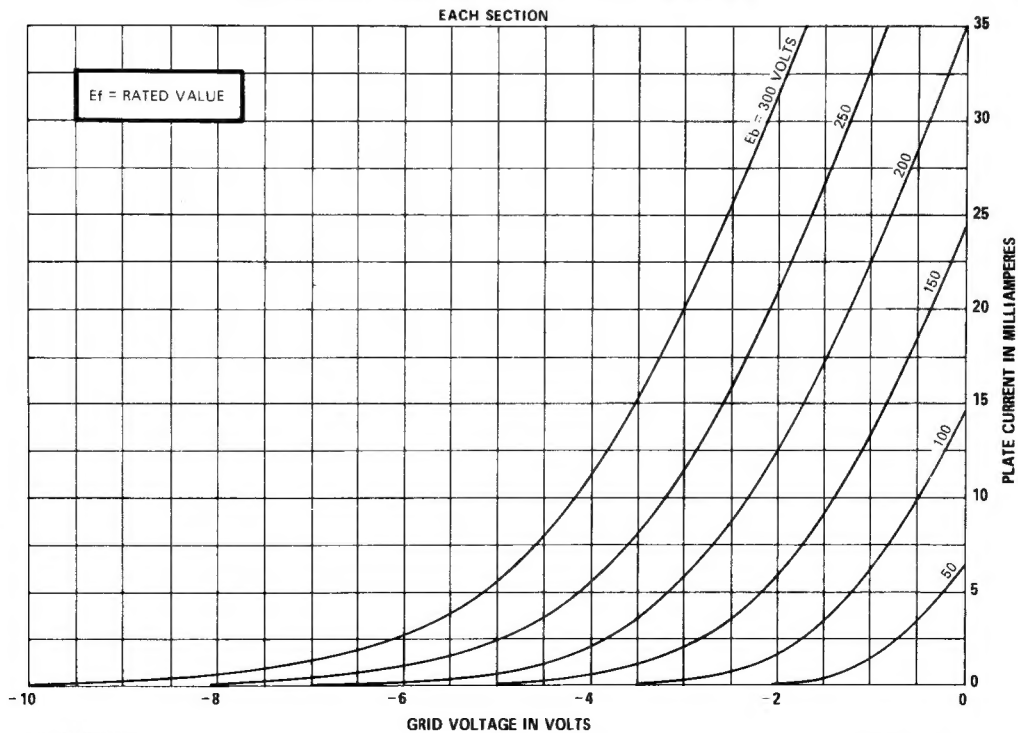
AVERAGE PLATE CHARACTERISTICS



K-55611-TD358-2

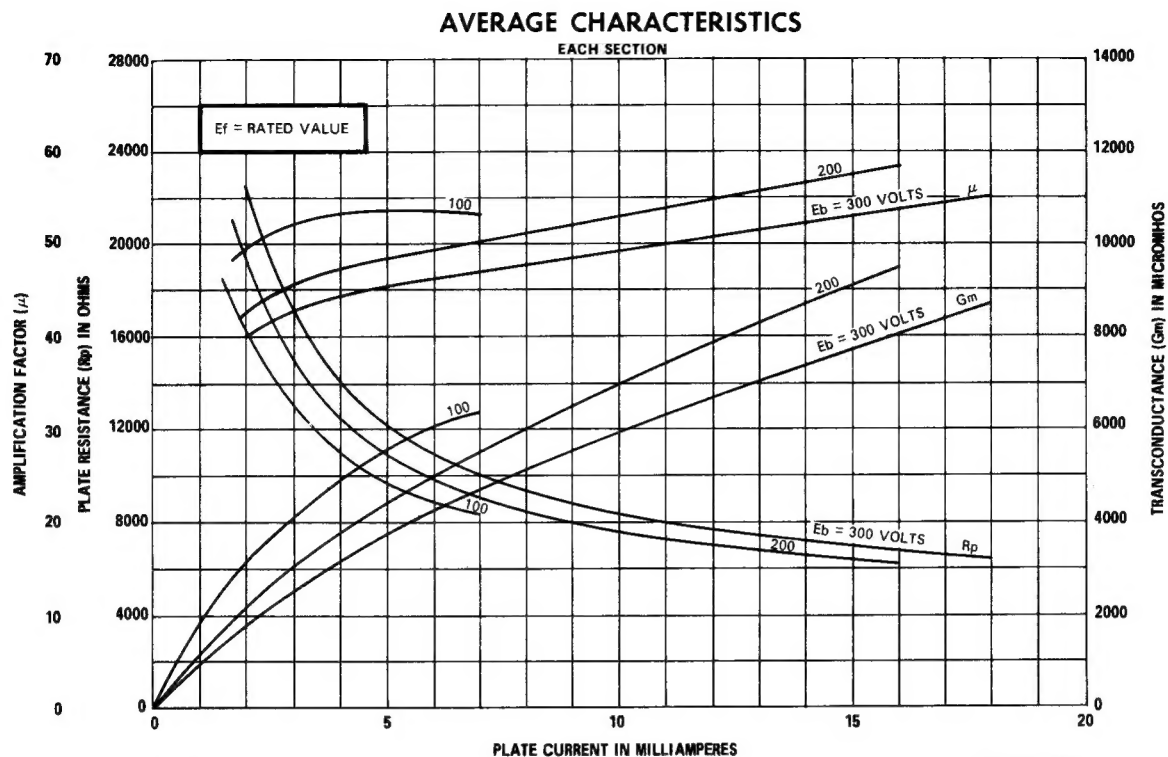
August 30, 1968

AVERAGE TRANSFER CHARACTERISTICS



K-55611-TD358-3

August 30, 1968



K-55611-TD358-4

August 30, 1968

TUBE DEPARTMENT
GENERAL  ELECTRIC
Owensboro, Kentucky 42301